

GYNECOLOGY

UNDER THE CHARGE OF

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Cystitis, with Special Reference to its Localization.—In a general review of our present knowledge of the bacteriology of cystitis, GERAGHTY (*Surg., Gynec. and Obst.*, 1917, xxiv, 655) says that while all the pyogenic bacteria are capable of producing inflammations of the bladder, and most of the known forms of bacteria have been isolated by investigators at one time or another, organisms of the colon group are the most frequent cause of cystitis, both acute and chronic. Bacteriological studies have further shown the old idea to be no longer tenable that an acid cystitis is usually due to the tubercle bacillus, for as a matter of fact, the urine in the vast majority of cases in simple cystitis is acid. The colon bacillus, the staphylococcus, different varieties of the streptococcus, the gonococcus, and many other organisms are usually associated with an acid cystitis, while organisms belonging to the proteus group usually produce an alkaline cystitis, with the well-known ammoniacal, ropy, mucoid condition of the urine. It is of interest to note, says the author, that there is a peculiar specificity displayed by different bacteria for different parts of the urinary tract. Thus, the primary focus of tuberculosis in the urinary tract is well known to be practically always in the kidney, vesical tuberculosis being secondary to the infection above, when it occurs. The gonococcus has a special predilection for the mucosa of the urethra; the only portion of the bladder commonly involved is the trigone, diffuse gonorrheal cystitis being extremely rare, while proven cases of gonorrheal infection of the kidney are rarer still. The typhoid bacillus, on the other hand, attacks principally the kidney, and usually produces a lesion of mild degree, resulting in nothing more than a bacilluria. The colon bacillus, staphylococcus, streptococcus, pyocyanus, and some other organisms attack the kidney, bladder, and posterior urethra apparently with equal facility. With the possible exception of the tubercle bacillus, there is nothing characteristic in the lesions produced by these various bacteria, and it is impossible from the symptoms or pathology of a vesical lesion to determine the variety of invading organism, but so far as therapy is concerned, a knowledge of the organism concerned is of little real value, since no special drugs have as yet been shown to have any specificity of action for any special group of bacteria. With regard to treatment, Geraghty advises in acute cystitis the liberal employment of sedatives, in order to place the bladder at rest as much as possible. To aid in this, the amount of water ingested should be decreased to the absolute needs of the individual, so that the bladder will not be compelled to be constantly expelling the rapidly accumulating urine. To combat the increased acidity of the resulting concentrated urine, alkalis should be given to the point where the reaction becomes alkaline. Urotropin is useless, in the author's opinion, in these cases, since if the

urine is allowed to remain acid the formaldehyde liberated only adds to the irritation, while if it is rendered alkaline, the urotropin is inert. Active treatment, such as instrumentation, irrigations, and instillations during the acute stage are usually more harmful than beneficial. If the symptoms do not rapidly subside, or the condition has become chronic, it is usually an indication that there is present some complication, either in the bladder itself or elsewhere in the urinary tract, whose discovery and elimination is of the utmost importance, since in most cases the successful treatment of a case of chronic cystitis will depend upon the ability of the physician to locate the intravesical or extravesical factor which is responsible for the continuance of the infection. In a certain number of cases, however, it must be admitted that the failure of the vesical infection to disappear spontaneously is not due to any extravesical factor. In most of these, the disease is not a diffuse cystitis, but is a localized affair, with normal mucous membrane lying between the infected areas, which latter may be single or multiple. Sometimes the lesion is a localized area of reddening and hyperemia, at others there is edema of the mucous membrane, and even the formation of bulge and superficial ulcerations. When the lesion involves only the mucosa and to a slight extent the submucosa, simple irrigations with silver nitrate, or other silver salts, with overdistention of the bladder at each treatment, will generally suffice. If the involvement extends deeper into the bladder wall, however, such irrigations have but little effect. Here Geraghty fills the bladder with salt solution, and then through a ureteral catheter cut off square at the end, with no side eye, he injects directly against the infected area a 10 to 20 per cent. silver nitrate solution, which being instantly neutralized by the salt solution, does not irritate the remainder of the bladder mucosa. In some cases, there is found on cystoscopic examination a localized area in which the mucosa looks whiter than normal, with a puckered or scarred condition. Here one can feel reasonably sure that the condition involves the whole thickness of the bladder wall, and that no local applications will afford relief, but that extensive resection must be resorted to. These are the cases which have been especially studied by Hunner, whose work was reviewed in this department about two years ago.

Peritonitis following Acute Ovaritis of Anginal Origin.—According to WILDER (*Tr. Chicago Path. Soc.*, 1916, x, 46) hemogenic disease of the ovaries, arising by metastasis from disease of the tonsils or other distant foci, is probably more common than is usually supposed, and may account for many obscure cases of peritonitis. The occurrence of ovaritis as a sequel of general sepsis, measles, typhoid, cholera, and other infections has been observed, but the instances recorded are few, and the general tendency of gynecologists is to consider ovarian disease as a gonorrheal infection, ascending from the lower genital tract. It is significant, however, that of all reported cases of so-called primary peritonitis, a decided majority have occurred in females, this predilection suggesting to the author the possibility that the sex organs play a significant role. Most of these cases occurred during the course of a tonsillar infection, and it seems more than probable that they were in reality metastatic infections from the throat. The following case in support of this theory is reported by Wilder: The patient was a child,